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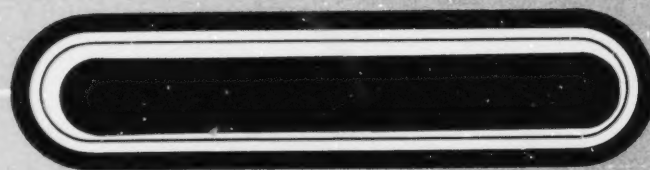
ABSTRACT

Federal funding for research and other programs at historically black colleges is examined in an effort to determine how successful these programs have been in increasing the numbers and qualifications of black scientists. Data were obtained from agencies of the federal government, the United Negro College Fund, and the Institute for Services to Education. The data indicate that a majority of the federal funding for programs at black colleges was provided by the Atomic Energy Commission, Department of Health, Education and Welfare, Environmental Protection Agency, National Aeronautics and Space Administration, National Science Foundation, and the United States Department of Agriculture. Although funding levels in general have increased during recent years, the data also indicate that funding levels to specific groupings of institutions such as private colleges have either leveled off or dropped. The National Science Foundation funded programs at only 29.4 percent of the private black colleges in 1976 compared to 58.8 percent in 1974. The data also indicate that more black graduates are being accepted to graduate schools, that the number of students enrolled at black institutions has increased, and that the number of graduates majoring in social sciences has also grown. Higher funding levels are recommended to meet the needs of this increasing pool of black students and institutions and to encourage black students to study science. (SF)

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RESOURCE CENTER FOR SCIENCE & ENGINEERING

FEDERAL AGENCIES AND THE BLACK
COLLEGES AND UNIVERSITIES

RCSE Report
NUMBER 2

by
John T. Hayes, Ph.D.

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Background

This report is a condensed version of a longer report which addressed three questions:

1. What has been the pattern and level of Federal funding for research and other programs at historically Black colleges and universities in the United States?
2. How effective have these programs been in achieving such objectives as increasing the numbers and qualifications of Black scientists?
3. What recommendations might be made for improving the effectiveness of Federal programs in achieving such objectives?

The limitation to the universe of historically Black institutions is intentional. More data are available on this group than on the newly Black institutions, or other more recently defined minority institutions. Time was also an important limiting factor, dictating a scope that might be accomplished within a few months. Subsequent studies may take up similar analysis of the other institutional categories.

Sources

The nucleus of the original report is information provided in the reports of the Federal Interagency Committee on Education (FICE). Data were also obtained directly from agencies of the Federal Government, from reports by programs in those agencies, and from sources outside the government, such as the United Negro College Fund (UNCF) and the Institute for Services to Education (ISE).

The author is himself familiar with the programs of the Black colleges, having been on the faculty of one of them for

the past ten years, during which time he served as Project Director for a MISIP project funded by the National Science Foundation. In addition to his personal knowledge thus gained, the author is indebted to colleagues among Black scientists and administrators for their insights and valuable critique of earlier drafts of the report.

Results and Discussion

The six agencies shown in Table 1 have provided the majority of Federal funding for programs at historically Black colleges and universities. They are: the Atomic Energy Commission (now Department of Energy); the Department of Health, Education, and Welfare (including the National Institutes of Health); the Environmental Protection Agency; the National Aeronautics and Space Administration; the National Science Foundation; and the United States Department of Agriculture.

Positive efforts and increased funding levels were shown for these agencies for the period under study (Figure 1). In many cases, however, funding levels to specific groupings of institutions such as the private colleges shown in Table 2, had leveled off or even dropped by 1976, compared to one or more earlier years. For example, the National Science Foundation funded programs at only 29.4 percent of the private Black colleges in 1976, compared to 58.8 percent in 1974 or 52.0 percent in 1971. The irony is that a private Black college had a better probability of being funded in 1971 - before the targeted MISIP program - than in 1976. The problem is largely one of a constant \$5 million funding level for the MISIP program, coupled

with an expanding pool of eligible institutions. The average award per MISIP institution sank from \$294,000 in 1972, to only \$151,000 in 1977, as shown in Table 3.

The National Science Foundation also has had the RIMI program since 1973 (Table 4). This started under the oversight of the MISIP program in the Science Education Directorate, but involved \$1 million in funding from the three basic science directorates. It is not at all clear how viable this program is at the present time (January 1979).

Recent figures from the budget office at the National Science Foundation show an upturn in funding at the Black colleges since 1976 (Table 5). After a low of 74 awards (average size: \$55,400) in 1976, the awards at these institutions increased to 106 in 1978 (average award: \$74,800).

For this condensed report, it is not possible to go into details of all the other programs in NSF, nor at all the other agencies of the Federal Government. The most instructive is the case of two programs at the National Institutes of Health (Table 6). The Minority Access to Research Careers (MARC) Program, in the National Institute of General Medical Sciences, is an institutional fellowship and traineeship program for faculty members and students at eligible institutions. The overall objective is to increase the number of minority scientists engaged in biological research, and ultimately the number of such scientists with the Ph.D. degree.

The Minority Biomedical Support (MBS) Program, in the Division of Research Resources, identifies two primary objectives. The first is to increase the number and quality of minority health scientists. The second is to strengthen the capabilities of minority-eligible institutions to provide training and research for students headed into such careers.

The MBS Program has made exemplary use of "forward planning" to achieve the expansion seen in Table 11. Notably, there is a philosophy to "pro-act", rather than be forced into a "react" posture. Perhaps the more significant fact is not that MBS funding has gone from \$2 million in 1972 to \$9.6 million in 1977, but rather that awards from NIH outside MBS and MARC were increased from \$3.0 million in 1971 - before these programs went into effect - to \$6.9 million in 1977 (Table 6).

The mechanism used is one of so-called "Intra-Agency Agreements" between the MBS Program and most of the other categorical institutes that make up the National Institutes of Health. The model of this "multiplier effect," fanning out into the rest of NIH (Table 11), can lead to a broader model as shown later.

For the National Science Foundation, the MBS model suggests an approach which might provide the RIMI Program with a mechanism for increased viability and greater effectiveness in involving the basic science directorates with the Black colleges and other minority institutions.

Discussion has centered so far on federal program input into the Black colleges and universities. It is worth pointing out that the state and local government investment in these institutions has also increased, as has support from the private sector (Table 7). This may suggest areas for creative effort in the future.

Most studies of programs funded by the Federal Government at minority institutions have been limited to program input. In the present study, output was also considered. For example in Table 7, with private Black institutions, the quality of graduates as measured by increased percentage of acceptance into graduate schools went from 16 percent in 1971 to 23 percent in 1977. Similar improvements were also found for graduates of public and land-grant ("1890") institutions.

Numbers of students enrolled at the historically Black institutions have increased from 139,444 in 1967 to 213,720 in 1978. Table 8 also shows that graduates with the bachelor's degree (all disciplines) rose from less than 16,000 in 1967 to over 25,000 in 1973, the last date for which comparable totals were available from the sources used.

Graduates in the sciences have also increased, but mostly in the social sciences, as shown in Table 9. This gives cause for concern in the biological and physical sciences, since it is from these disciplines that students enter the medical and engineering fields.

Some understanding of the nature of the problem may be

found in consideration of the data of Table 10. Not only do Black students at the bachelor's level favor the social sciences, but they do so much more (index greater than 100) than the total of all such students. Blacks are under-represented (index less than 100) in all science fields at the master's and doctoral levels, but this is most pronounced in the biological and physical sciences. This may suggest ways and levels at which the problem of increasing the numbers of Black health scientists and engineers should be addressed.

What does it all mean?

Conclusions and Recommendations

From the larger report, and the condensed version presented here, it is evident that there is a need for better collection of coherent data on which to base informed decisions. There is also a need for increased funding levels, to parallel the increasing size of the pool of eligible institutions. For long-range planning, thought should be given to conceptual models for institutional development in relation to Federally funded programs.

The germ for one such model can be found in the pattern of NIH funding shown in Table 11. The Cancer and the Heart, Lung, and Blood institutes have been involved the longest and most intensively with the minority institutions. Other categorical institutes have been added in recent years. As of FY1979, most institutes have made formal commitments.

At the same time, individual case studies such as were seen in Figure 2 reveal instances of program sequencing. The analogy is with DNA mapping by putting together overlapping pieces of DNA. Two institutional examples are noted here. Students prepared and motivated by experiences in NIH's MBS program applied for and received support under NSF's Student Originated Studies (SOS) Program. In other cases, successful MISIP projects funded by NSF were instrumental in an institution's successful application for funding from NASA or DOE. This leads to the conceptual model depicted in Figure 3.

While addressing specifically the Black colleges, this model turns out to have general applicability to institutions of higher education in the United States.

This particular model was built ad hoc, largely from analysis of what the institutions have in fact been doing. Careful refinement would be necessary before it could be fully utilized for planning. For example, valuable input could be given by those familiar with a) computer flow charts; b) PERT management diagrams; and c) competency-based and self-paced learning strategies. An institution, like a student, might "recycle" at a given stage, until meeting exit criteria which serve at the same time as entry criteria for another level.

The findings of the present report are preliminary. Further study is needed to provide more detailed data in certain areas, and to develop modules for the conceptual model proposed. The author hopes the ideas contained in this report will be taken in this context.

TABLE 1
OBLIGATIONS OF SELECTED FEDERAL AGENCIES TO HISTORICALLY BLACK COLLEGES
AND UNIVERSITIES, FY1969-FY1976. (DOLLARS IN THOUSANDS)

AGENCY	YEAR							
	1969	1970	1971	1972	1973	1974	1975	1976
AEC/DOE	59	202	308	210	393	172	220	245
DHEW	87,259	100,411	145,918	209,068	202,005	234,209	205,305	341,018
EPA	1/	1/	147	178	496	720	566	634
NASA	694	640	831	897	1,319	2,272	2,512	2,225
NSF	3,463	3,185	3,074	9,392	6,977	8,166	5,284	4,801
USDA	494	1,127	2,049	14,092	17,745	17,439	16,425	17,801
TOTAL	91,969	105,565	152,327	233,837	228,935	262,978	230,312	366,724

1/ NO DATA.

SOURCE: FICE DATA.

NSB 79-581
1-79

TABLE 2

**PERCENTAGE OF PRIVATE HISTORICALLY BLACK COLLEGES
AND UNIVERSITIES RECEIVING FUNDS FROM SELECTED
FEDERAL AGENCIES, FY1971-FY1976. (N = 51)**

YEAR

<u>AGENCY</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
AEC/DOE	6.0	5.9	9.8	5.9	5.9	3.9
DHEW	100.0	100.0	100.0	100.0	100.0	100.0
EPA	6.0	3.9	11.8	11.7	11.8	11.8
NASA	8.0	13.7	15.7	29.4	37.3	27.5
NSF	52.0	54.9	52.9	58.8	45.1	29.4
USDA	4.0	3.9	3.9	2.0	2.0	2.0

SOURCE: FICE.

TABLE 3
A SUMMARY OF THE NATIONAL SCIENCE FOUNDATION'S AWARDS UNDER ITS MINORITY
INSTITUTIONS SCIENCE IMPROVEMENT PROGRAM (MISIP), FY1972-FY1978.
(DOLLARS IN THOUSANDS)

FISCAL YEAR	INSTITUTIONAL AWARDS	OTHER AWARDS	INSTITUTIONAL AWARDS	AVERAGE VALUE OF INSTITUTIONAL AWARD	TOTAL OF ALL AWARDS
1972	17	0	4,992	294	4,992
1973	19	1	4,176	220	4,233
1974 ^{1/}	26	2	5,574	214	5,941
1975 ^{2/}	21	5	4,525	215	4,995
1976	25	7	4,469	179	4,780
1977	33	5	4,989	151	5,209
1978 ^{3/}	24	4	4,460	186	4,696

^{1/} 2-YEAR INSTITUTIONS ADDED TO ELIGIBLE POOL.

^{2/} "PREDOMINANTLY MINORITY" ADDED TO "HISTORICALLY BLACK" INSTITUTIONS IN THE ELIGIBLE POOL.

^{3/} RESTRICTIONS TO ACCREDITED INSTITUTIONS ADDED; ALSO A WAITING PERIOD NOW REQUIRED.

SOURCE: NSF DATA BOOK ON THE MINORITY INSTITUTIONS SCIENCE IMPROVEMENT PROGRAM, FY1972-FY1978.

NSB 79
1-7

TABLE 4

A SUMMARY OF THE NATIONAL SCIENCE FOUNDATION'S AWARDS TO FACULTY AT MINORITY INSTITUTIONS UNDER THEIR RESEARCH INITIATION IN MINORITY INSTITUTIONS (RIMI) PROGRAM, FY1973-FY1978. (DOLLARS IN THOUSANDS)

<u>FISCAL YEAR</u>	<u>NUMBER OF AWARDS</u>	<u>TOTAL AWARD DOLLARS</u>	<u>AVERAGE AMOUNT OF AWARD</u>
1973	41	788	19
1974	49	997	20
1975	46	925	20
1976 + T. Q. ^{2/}	55	1,258	23
1977	51	979	19
1978	1/	1/	1/

^{1/} STATUS OF PROGRAM IN FY1978 IN DOUBT.

^{2/} T. Q. = TRANSITION QUARTER, 1 JULY 1976 THROUGH 30 SEPTEMBER 1976.

SOURCE: NSF/MIS DATA.

TABLE 5
A SUMMARY OF RECENT (FY1975-FY1978) NATIONAL SCIENCE FOUNDATIONS AWARDS^{1/}
TO HISTORICALLY BLACK FOUR-YEAR COLLEGES AND UNIVERSITIES.^{2/}
(DOLLARS IN THOUSANDS)

<u>FISCAL YEAR</u>	<u>NUMBER OF AWARDS</u>	<u>TOTAL AMOUNT OF AWARDS</u>	<u>AVERAGE SIZE OF AWARD</u>
1975	97	4, 720	48. 7
1976 ^{3/}	74	4, 100	55. 4
1977	107	4, 941	46. 2
1978	106	7, 933	74. 8

^{1/} SOURCE: BUDGET OFFICE, NSF.

^{2/} N = 90, INCLUDING GRADUATE INSTITUTIONS.

^{3/} 15 MONTHS: 1 JULY 1975 THROUGH 30 SEPTEMBER 1976.

TABLE 6
AMOUNTS AWARDED TO MINORITY INSTITUTIONS^{1/} BY THE NATIONAL INSTITUTES OF HEALTH (NIH)
IN FISCAL YEARS 1967-1977. (DOLLARS IN THOUSANDS)

FISCAL YEAR	MINORITY PROGRAM MARC ^{2/}	MBS	ALL OTHER NIH PROGRAMS AT THESE INSTITUTIONS	TOTAL AMOUNT AWARDED BY THE NIH TO THESE INSTITUTIONS ^{3/}
1967	—	—	2,161	2,161
1968	—	—	2,110	2,110
1969	—	—	2,109	2,109
1970	—	—	2,122	2,122
1971	—	—	3,012	3,012
1972	46	2,000	4,443	6,489
1973	43	5,000	8,592	13,546
1974	3,518	7,948	5,212	16,678
1975	191	6,973	4,925	12,089
1976 ^{4/}	111	8,104	5,301	13,516
TQ ^{5/}	27	1,175	555	1,757
1977	109	9,653	6,855	16,617

^{1/} EXCLUDES THOSE REGARDED BY NIH AS REGULAR NIH AWARD RECIPIENTS.

^{2/} AS DEFINED BY NIGMS/NIH.

^{3/} ANY DISCREPANCIES DUE TO ROUNDING LINE TOTALS.

^{4/} 1 JULY 1975 THROUGH 30 JUNE 1976.

^{5/} 1 JULY 1976 THROUGH 30 SEPTEMBER 1976.

SOURCE: NATIONAL INSTITUTES OF HEALTH.

TABLE 7
RELATIONSHIPS OF INCOME SOURCES, ENROLLMENT AND GRADUATES OF HISTORICALLY
BLACK PRIVATE INSTITUTIONS OF HIGHER EDUCATION, 1971 TO 1977.
(DOLLARS IN THOUSANDS; ALL FIGURES AS AVERAGE PER INSTITUTION)

<u>ITEM</u>	<u>YEAR</u>						
	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u> ^{1/}	<u>1975</u>	<u>1976</u>	<u>1977</u> ^{1/}
<u>INCOME SOURCES</u>							
FEDERAL	350	449	584	(533)	935	1231	948
STATE/LOCAL	17	21	8	(41)	72	104	45
PRIVATE GIFTS/GRANTS	471	617	677	(499)	783	759	716
<u>ENROLLMENT</u>							
TOTAL	921	934	899	(682) ^{2/}	996	1059	1024
<u>GRADUATES</u>							
TOTAL	171	175	169	159	157	160	149
ACCEPTED TO GRAD./PROF'L SCHOOL	28	24	30	(24)	34	30	33
PERCENT ACCEPTED	16	14	19	(19)	22	20	23

^{1/} THE NUMBER OF INSTITUTIONS IN THIS GROUP WAS 46. DATA IN 1974 WERE AVAILABLE FOR ONLY 29 INSTITUTIONS; 37 IN 1977. FIGURES FOR THESE YEARS ARE DEPRESSED, ESPECIALLY IN 1974, SINCE IT WAS GENERALLY THE LARGER INSTITUTIONS THAT WERE NOT IN THE DATA BASE. SEE () AROUND MOST 1974 FIGURES.

^{2/} ACTUALLY KNOWN TO BE AN INCREASE FOR 1974 COMPARED TO 1973 (BASED ON OTHER SOURCES).

SOURCE: DHEW, TITLE III, AIDP AND BIDP DATA.

TABLE 8
FEDERAL FUNDING, ENROLLMENT, AND BACCALAUREATE DEGREES AWARDED AMONG THE HISTORICALLY
BLACK COLLEGES^{1/}, 1963-1978. (DOLLARS IN THOUSANDS)

<u>ACADEMIC AND FISCAL YEAR</u>	<u>FEDERAL OBLIGATIONS^{2/}</u>	<u>ENROLLMENT IN FALL OF THE PREVIOUS YEAR^{3/}</u>	<u>BACCALAUREATE DEGREES AWARDED^{3/}</u>
1963	18,448	—	—
1964	—	—	—
1965	—	—	—
1966	—	—	15,728
1967	10,448	139,444	15,649
1968	89,530	148,301	17,185
1969	107,896	154,977	20,078
1970	125,479	161,709	22,604
1971	170,584	168,328	24,039
1972	257,018	178,143	24,976
1973	250,094	181,289	25,094
1974	275,979	184,559	—
1975	239,664	189,011	—
1976	368,855	211,120	—
1977	—	211,966	—
1978	—	213,720	—

^{1/} SEE LIST OF INSTITUTIONS, APPENDIX A.

^{2/} FICE DATA REPRESENTING MORE THAN 95% OF ALL FEDERAL OBLIGATIONS TO THESE INSTITUTIONS.

^{3/} DATA FROM THE INSTITUTE FOR SERVICES TO EDUCATION (ISE).

NOTE: A "—" INDICATES NO DATA AVAILABLE PRESENTLY, FROM THESE SOURCES.

TABLE 9
BACCALAUREATE DEGREES GRANTED IN THE SCIENCES^{1/}
AT HISTORICALLY BLACK COLLEGES, ACADEMIC YEARS 1966-1973^{2/}.

SCIENCE AREA

<u>YEAR</u>	<u>BIOLOGICAL</u>	<u>SOCIAL</u>	<u>PHYSICAL</u>	<u>TOTAL</u>
1966	1050	2705	402	4157
1967	933	2889	383	4205
1968	1049	3332	373	4754
1969	1138	4167	391	5696
1970	1109	5049	447	6605
1971	1169	5453	388	7010
1972	1060	5476	433	6968
1973	872	4915	415	6202

^{1/} SEE NATIONAL SCIENCE FOUNDATION DEFINITION.

^{2/} SOURCE: DEGREES GRANTED AND ENROLLMENT TRENDS IN HISTORICALLY BLACK COLLEGES: AN EIGHT-YEAR STUDY (INSTITUTE FOR SERVICES TO EDUCATION 1974).

TABLE 10
DISTRIBUTION OF SCIENCE DEGREES AWARDED IN ACADEMIC YEAR 1975-1976, BY MAJOR
FIELD AND LEVEL, TO BLACK STUDENTS AND TO ALL STUDENTS^{1/}.

<u>DEGREE LEVEL AND GROUP ^{2/}</u>	<u>MAJOR FIELD</u>		
	<u>BIOLOGICAL SCIENCES</u>	<u>SOCIAL SCIENCES</u>	<u>PHYSICAL SCIENCES</u>
<u>BACHELOR'S</u>			
BLACK STUDENTS	3.9	18.6	1.1
ALL STUDENTS	5.9	13.7	2.3
INDEX: B/A ^{3/}	66	136	48
<u>MASTER'S</u>			
BLACK STUDENTS	1.1	4.3	0.7
ALL STUDENTS	2.1	5.1	1.7
INDEX: B/A	52	84	41
<u>DOCTORATES</u>			
BLACK STUDENTS	4.3	9.6	3.4
ALL STUDENTS	10.0	12.2	10.1
INDEX: B/A	43	79	34

^{1/} SOURCE: NATIONAL ADVISORY COUNCIL ON BLACK HIGHER
EDUCATION AND BLACK COLLEGES AND UNIVERSITIES (1978 REPORT).

^{2/} GROUP FIGURES EXPRESSED AS PERCENTAGE OF TOTAL FOR GROUP.

^{3/} INDEX: B/A = $\frac{\text{PERCENT BLACK STUDENTS FOR GROUP}}{\text{PERCENT ALL STUDENTS FOR GROUP}} \times 100.$

TABLE 11
A MODEL OF THE MULTIPLIER EFFECT IN NATIONAL INSTITUTES OF HEALTH FUNDING
OF SCIENCE PROJECTS AT MINORITY INSTITUTIONS.
(ALL DOLLARS IN THOUSANDS)

<u>FISCAL YEAR</u>	<u>NIH UNIT</u>						
	<u>NICHD</u>	<u>NAIAID</u>	<u>NCI</u>	<u>MBS/DRR</u>	<u>NHLBI</u>	<u>NIDR</u>	<u>NIA</u>
1972	—	—	—	2,000	—	—	—
1973	—	—	—	5,000	—	—	—
1974	—	—	—	8,000	—	—	—
1975	—	—	228	7,270	114	—	—
1976 + TQ	—	—	786	8,848	744	—	—
1977	—	112	1,138	9,711	441	26	178
1978	262	114	1,466	10,758	1,398	32	215

SOURCE: ANNUAL REPORT, FY1978 (MBS/DRR/NIH).

FIGURE 1
CHANGES IN LEVELS OF
FEDERAL FUNDING AT
BLACK INSTITUTIONS,
FISCAL YEARS 1969-1976
(AS MULTIPLES OF 1969 ^{1/}
BASE).

^{1/} EPA BASE YEAR IS 1971

SOURCE: TABLE 1 (AFTER FICE DATA)

MULTIPLE OF BASE ^{1/} YEAR

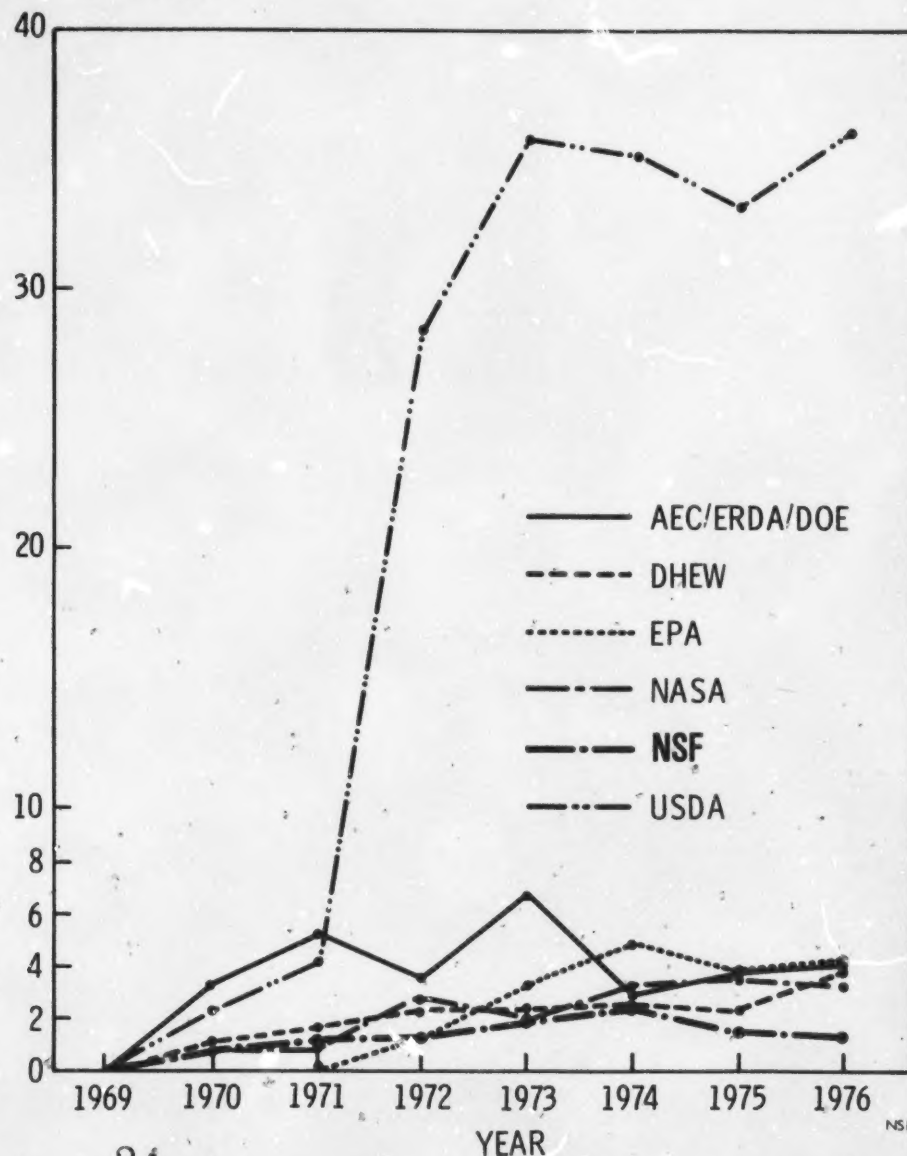
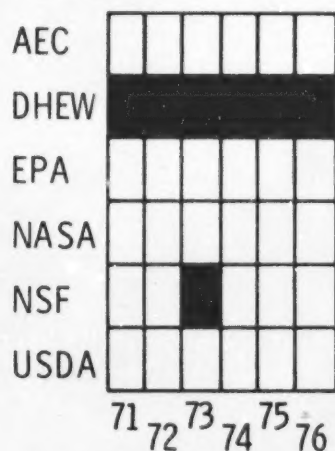


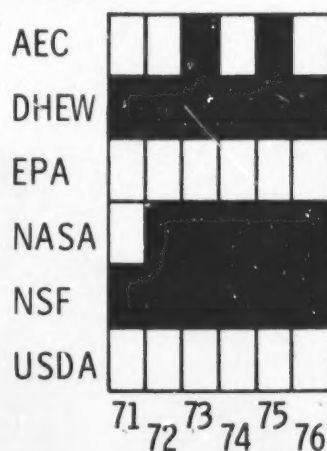
FIGURE 2

EXAMPLES OF FEDERAL AGENCY INVOLVEMENT WITH HISTORICALLY BLACK COLLEGES.

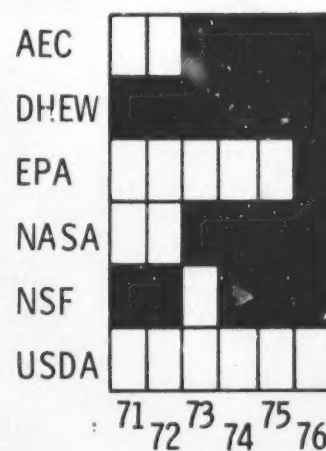
CASE A: PRIVATE
AGENCY



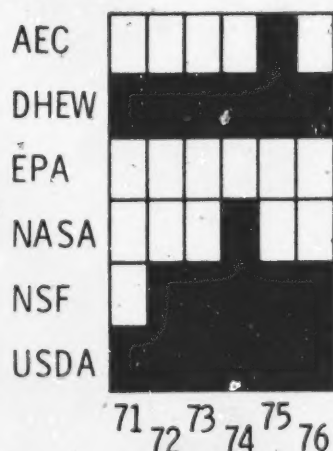
CASE B: PRIVATE
AGENCY



CASE C: PUBLIC
AGENCY



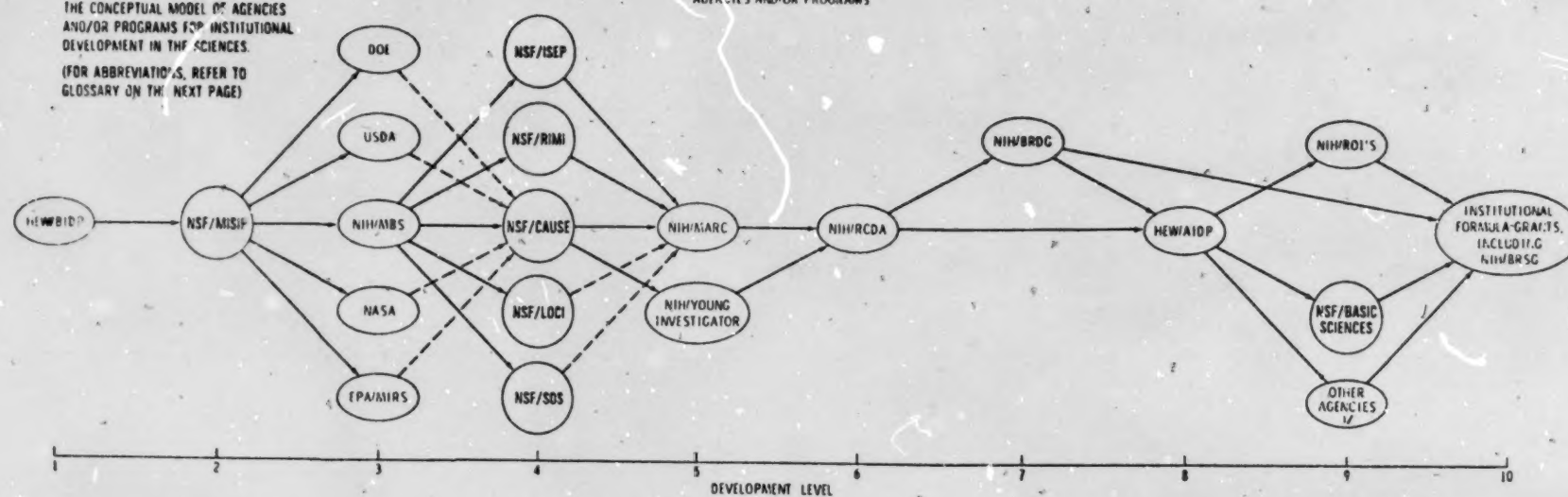
CASE D: LAND-GRANT
AGENCY



CASE E: "SPECIAL"
AGENCY



FIGURE 3
THE CONCEPTUAL MODEL OF AGENCIES
AND/OR PROGRAMS FOR INSTITUTIONAL
DEVELOPMENT IN THE SCIENCES.
(FOR ABBREVIATIONS, REFER TO
GLOSSARY ON THE NEXT PAGE)



^{1/} "OTHER AGENCIES" ARE ACTUALLY INCLUDED AT OTHER LEVELS,
WHERE APPROPRIATE, EVEN THOUGH NOT LISTED HERE.

Figure 3 (continued):Glossary of terms.

Term	Expansion or Annotation
AIDP	Advanced Institutional Development Program
BIDP	Basic Institutional Development Program
BRDG	Biomedical Research Development Grant (non-formula)
BRSG	Biomedical Research Support Grant (formula)
CAUSE	Comprehensive Assistance to Undergraduate Science Education
DOE	Department of Energy (formerly AEC; then ERDA)
EPA	Environmental Protection Agency
HEW	Department of Health, Education, and Welfare
Institutional Formula Grants	Grants based on the institution's previous level of funding, by percentage formula times previous total
ISEP	Instructional Science Equipment Program
LOCI	Local Course Improvement
MARC	Minority Access to Research Careers
MBS	Minority Biomedical Support
MIRS	Minority Institution Research Support
MISIP	Minority Institution Science Improvement Program
NASA	National Aeronautics and Space Administration
NIH	National Institutes of Health
NSF	National Science Foundation
NSF/Basic Sciences	National Science Foundation Basic Science Directorates, as distinct from the Science Education Directorate
RCDA	Research Career Development Award
RIMI	Research Initiation in Minority Institutions
RO1	Basic investigator-initiated research grant
SOS	Student Originated Studies
USDA	United States Department of Agriculture
Young Investigator	Grants for young, as opposed to established, scientists